

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1 – 32. (cancel)

33. (currently amended) The light-emitting device comprising:

a compound semiconductor layer having a light-emitting layer portion, being configured so that a first main surface of which serves as a light extraction surface;

wherein the light-emitting layer portion is configured as having a double heterostructure in which a first-conductivity-type cladding layer, an active layer and a second-conductivity-type cladding layer, all of these layers being composed of  $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$  (where,  $0 \leq x \leq 1$  and  $0 \leq y \leq 1$ ), are stacked in this order; and

a device substrate bonded on a second main surface side of the compound semiconductor layer while placing a main metal layer in between, the main metal layer having a reflective surface for reflecting light from the light-emitting layer portion back towards the light extraction surface side; further comprising:

a diffusion-blocking layer interposed between the device substrate and the main metal layer, being composed of a conductive material, and provided for blocking diffusion of any device-substrate-derived components towards the main metal layer;

further comprising a substrate-side contact metal layer interposed between the diffusion-blocking layer and the device substrate, intended for reducing contact resistance between the device substrate and the diffusion-blocking layer; and

wherein the main metal layer is composed of an ~~Au-base~~ Ag-base layer having **[[Au]] Ag** as a major component, at least in a portion including the interface with the diffusion-blocking layer, and the device substrate is a Si substrate.

34. (original) The light-emitting device as claimed in Claim 33, wherein the diffusion-blocking layer is a metal layer for blocking diffusion, having either Ti or Ni as a major component.

35. (original) The light-emitting device as claimed in Claim 34, wherein the metal layer for blocking diffusion has a thickness of 1 nm to 10  $\mu\text{m}$ , both ends inclusive.

36. (currently amended) The light-emitting device as claimed in Claim 33, wherein the device substrate is an n-type Si substrate, and further comprises a substrate-side contact metal layer interposed between the diffusion-blocking layer and the Si substrate, being composed of an **[[AuSb]] AgSb** alloy or an **[[AuSn]] AgSn** alloy, and being intended for reducing contact resistance between the Si substrate and the diffusion-blocking layer.

37. (original) The light-emitting device as claimed in Claim 33, wherein the Au-base

layer composes the reflective layer.

38. (currently amended) A light-emitting device comprising:

a compound semiconductor layer having a light-emitting layer portion, being configured so that a first main surface of which serves as a light extraction surface;

wherein the light-emitting layer portion is configured as having a double heterostructure in which a first-conductivity-type cladding layer, an active layer and a second-conductivity-type cladding layer, all of these layers being composed of  $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$  (where,  $0 \leq x \leq 1$  and  $0 \leq y \leq 1$ ), are stacked in this order; and

a device substrate bonded on a second main surface side of the compound semiconductor layer while placing a main metal layer in between, the main metal layer having a reflective surface for reflecting light from the light-emitting layer portion back towards the light extraction surface side; further comprising;

a diffusion-blocking layer interposed between the device substrate and the main metal layer, being composed of a conductive material, and provided for blocking diffusion of any device-substrate-derived components towards the main metal layer; wherein, the main metal layer is composed of an ~~Au-base~~ ~~Ag-base~~, composed of pure **[[Au]] Ag**, or an **[[Au]] Ag** alloy having a ratio of **[[Au]] Ag** content ratio of 95% by mass or above, at least in a portion including the interface with the diffusion-blocking layer, and the device substrate is a Si substrate; and

wherein an Ag-base layer interposed between the Au-base layer and the compound semiconductor layer, and having Ag as a major component, composes the

reflective layer.

39 – 90. (cancel)

91. (new) The light-emitting device comprising:

a compound semiconductor layer having a light-emitting layer portion, being configured so that a first main surface of which serves as a light extraction surface;

wherein the light-emitting layer portion is configured as having a double heterostructure in which a first-conductivity-type cladding layer, an active layer and a second-conductivity-type cladding layer, all of these layers being composed of  $(\text{Al}_x\text{Ga}_{1-x})_y\text{In}_{1-y}\text{P}$  (where,  $0 \leq x \leq 1$  and  $0 \leq y \leq 1$ ), are stacked in this order; and

a device substrate bonded on a second main surface side of the compound semiconductor layer while placing a main metal layer in between, the main metal layer having a reflective surface for reflecting light from the light-emitting layer portion back towards the light extraction surface side; further comprising:

a diffusion-blocking layer interposed between the device substrate and the main metal layer, being composed of a conductive material, and provided for blocking diffusion of any device-substrate-derived components towards the main metal layer;

further comprising a substrate-side contact metal layer interposed between the diffusion-blocking layer and the device substrate, intended for reducing contact resistance between the device substrate and the diffusion-blocking layer;

wherein the main metal layer is composed of an Ag-base layer and an Au-base

layer having Au as a major component, at least in a portion including the interface with the diffusion-blocking layer, and

the device substrate is a Si substrate.

92. (new) The light-emitting device as claimed in Claim 91, wherein the diffusion-blocking layer is a metal layer for blocking diffusion, having either Ti or Ni as a major component.

93. (new) The light-emitting device as claimed in Claim 92, wherein the metal layer for blocking diffusion has a thickness of 1 nm to 10  $\mu\text{m}$ , both ends inclusive.

94. (new) The light-emitting device as claimed in Claim 91, wherein the device substrate is an n-type Si substrate, and further comprises a substrate-side contact metal layer interposed between the diffusion-blocking layer and the Si substrate, being composed of an AuSb alloy or an AuSn alloy, and being intended for reducing contact resistance between the Si substrate and the diffusion-blocking layer.

95. (new) The light-emitting device as claimed in Claim 91, wherein the Ag-base layer composes the reflective layer.